DOCUMENT RESUME

ED 364 764 CE 065 338

AUTHOR Robinson, P.
TITLE Teachers Facing Change. A Small-Scale Study of Teachers Working with Competency-Based Training.
INSTITUTION National Centre for Vocational Education Research, Leabrook (Australia).
REPORT NO ISBN-0-86397-007-9
PUB DATE 93
NOTE 37p.
AVAILABLE FROM National Centre for Vocational Education Research Ltd., 252 Kensington Road, Leabrook, South Australia 5068, Australia.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Change; *Competency Based Education; *Educational Change; Educational Research; Foreign Countries; Postsecondary Education; Program Implementation; Staff Development; Student Evaluation; *Student Motivation; *Teacher Attitudes; *Teacher Role; Teaching Styles; Technical Education; Technical Institutes; Vocational Education
IDENTIFIERS Canberra Institute of Technology (Australia); *TAFE (Australia)

ABSTRACT

A study explored how eight Technical and Further Education (TAFE) teachers from Canberra Institute of Technology were dealing with changes to their role as a result of competency-based training. An extended interview was held with each participant; a set of focus questions provided a loose structure. Five teachers were observed; where possible, material was collected from teachers. Teachers were concerned that competency-based training can be unduly focused on the mastery of individual task skills rather than on the integration and application of those skills; they wondered whether it is possible to infer knowledge from performance. Particular areas in which teachers perceived some change in their pattern of work were the increased workload due to additional assessment and recordkeeping and personal style of educational delivery. Teachers' assessment concerns fell into two areas--practical issues in implementing competency-based assessment and more theoretical concerns such as appropriate standards for testing, issues around graded and ungraded assessment, and how to ensure that higher order cognitive skills are tested. Teachers felt that student motivation had not been aided by the competent/not-yet-competent marking system and more mature and motivated students were advantaged. The main source of information appeared to be discussions with colleagues. Staff development and changes in the work environment were suggested as ways to help teachers cope with change. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 364 764

Teachers facing change

P ROBINSON

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

A small-scale study of teachers working with competency-based training

PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

M Jones

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

CE065338

Teachers facing change

P ROBINSON

A small-scale study of teachers working with competency-based training

NCVER

Adelaide 1993

© 1993 National Centre for Vocational Education Research Ltd
A.C.N. 007 967 311

Single copies may be made by TAFE authorities without restriction

ISBN : 0 86397 007 9
TD/TNC: 35.04

Published by:
National Centre for Vocational Education Research Ltd
252 Kensington Road,
LEABROOK SA 5068

ACKNOWLEDGEMENTS

This report documents a small scale study based around interviews with eight teachers. Their interest, the time they were prepared to spend, and their generosity in allowing access to classes is gratefully acknowledged. In addition the support of colleagues in the Curriculum and Staff Development Unit of the Canberra Institute of Technology(CIT) who provided feedback on this paper, and an opportunity to discuss the issues involved, was invaluable.

The author is also grateful to David Lundberg of NCVER and Berwyn Clayton of CIT who acted as the reference group for this project and who contributed critical feedback and support.

CONTENTS

1. Introduction

1.1 Background 1
1.2 Definition of competency-based training 2
1.3 Purpose of the report 4
1.4 Structure of the report 4

2. Methodology

2.1 Qualitative methodology 6
2.2 Location of the study 7
2.3 The teachers 8
2.4 The interviews 8
2.5 Classroom observations and collection of materials 10
2.6 Evaluation of the methodology 10

3. The teachers' views

3.1 Knowledge and competency 12
3.2 Teachers' work patterns 14
3.3 Assessment 17
3.4 Views about students 22
3.5 Staff development 22

4. Conclusion

4.1 Overview 24
4.2 Future directions 27

References 30

1. INTRODUCTION

1.1 Background

The Training Reform Agenda and in particular the introduction of competency-based training implies considerable change in the delivery of education and training through Technical and Further Education (TAFE) and in particular for the work of TAFE teachers. The major focus of the Training Reform Agenda to date has been on the national reform processes including the identification of competency standards bodies, the development of national standards and of national curriculum.

This national focus, while probably inevitable at this stage in the introduction of major nationwide reform, has posed some problems for the TAFE teacher working at the end point of education and training delivery. First there is the issue of how to keep up to date with the information about training reform, both in a broad sense and in relation to their particular industry. Second, there is the problem of how to make sense of these changes, particularly when the experts do not necessarily agree amongst themselves. Third, there is the practical problem of translating the reform into practice in the learning environment. This is often complicated by the fact that the transition is only done in stages. It is usually not possible to wait until a perfect model is developed and then make a tidy change over. The more usual practice is to begin with partial reform and to solve the problems as they occur. Fourth, teachers have the task of explaining these changes to their students. This is not always a simple or comfortable task as students may be opposed to changes such as the ungraded pass system.

Interestingly, the questions around how teachers in the vocational education sector deal with these problems and issues has received little research attention. The focus of the literature on competency-based training, both in Australia and abroad, seems to be on the broad debate, the questions of what constitutes competency, how it should be defined, whether it is a useful direction to pursue, the differences between vocational and

higher education, and on the structural mechanism for delivering training reform into practice. [1]

This may reflect the fact that competency-based training shifts the focus away from the teacher and towards industry. The role of the teachers becomes less significant in shaping the training of students within this framework. Ideally under the competency-based training system envisaged in Australia, curriculum will be developed nationally. Flexible entry and exit, and self-paced learning will shift the teacher's role away from centre stage and more towards a learning support role. Stanton(1989) suggests that in Britain,

'college staff have shifted their role from teaching to tutoring functions, in the sense that their expertise in needs analysis, individual program design, and evaluation has become more important than their ability to present material in an entertaining manner in class' (p. 96).

1.2 Definition of competency-based training

The term competency-based training is widely used and recognised in the vocational education sector. There is; however, no unanimous agreement on the definition of the term 'competency'. Much of the criticism of competency-based training arises from the behaviourist paradigm which dominated the early thinking on the nature of competence and on the way in which it should be assessed. This behaviourist model focused on an analysis of tasks involved in an occupation and suggested that assessment of competence should be based on the direct observation of the performance of these tasks.

More recently, there has been a movement towards a more holistic approach to the definition of competency. This has been reflected in the most recent guidelines from the National Training Board, *National Competency Standards: Policy and Guidelines. 2nd Edition.* This publication outlines the Board's approach to competency in the following way :

[1] An exception to this is Haffenden and Brown 1989 (see list of references)

'The concept of competency focuses on what is expected of an employee in the workplace rather than on the learning process; and embodies the ability to transfer and apply knowledge and skills to new situations and environments . . . This is a broad concept of competency in that all aspects of work performance and not only narrow task skills are included . . . The Board's approach to standards development further recognises that performance is underpinned by knowledge and understanding. Attitudes and values are also involved in the competent performance of work.'

Gonczi(1993) offers a similarly holistic definition:

'A competent professional or worker at any occupational level has the attributes necessary for job performance to the appropriate standards.'

This definition includes skills, attitudes and knowledge as the relevant attributes of competent workers.

The Canberra Institute of Technology supports the broader definition of competency. It is in the process of moving towards a competency based format for all curriculum. All curriculum is outcome based at present and the use of the new formats in ACTRAC course design of competency-based curriculum is being phased in.

Like most institutions the discussion of policy on major issues such as competency-based training occurs at senior levels. The decisions regarding broad policy directions such as the holistic approach to competency may take some time to reach the classroom teacher.

Gonczi(1993) suggests that

'This (behaviouristic) view of competency has a strong grip on the thinking of TAFE teachers and industry trainers meshing as it does with the behavioural objectives approach to curriculum development and teaching which have been stressed in professional training.'

It may be, then, that despite an acceptance by senior managers and policy makers within the institute of the more holistic definition of competency, some teachers are operating on a behaviourist conception of competence. This study is in part an exploration of the gap which exists in most institutions between the official policy of that institution and the everyday practices of its staff.

1.3 Purpose of the report

The purpose of this report is to document a small-scale study undertaken in the Canberra Institute of Technology (CIT). CIT is a multi-campus institute of TAFE, teaching a range of courses from associate diploma through to trade courses.

The study aimed to explore how a group of TAFE teachers from CIT are dealing with changes to their role as a result of competency-based training. The particular issues to be considered in the study were how teachers are translating these changes into classroom practice, how they understand their changing role and how they evaluate their performance in a changed environment.

An additional purpose of the study was to assess the usefulness of a micro-interpretive methodology in obtaining research data that is useful for the development of educational policy and practice in TAFE.

1.4 Structure of the report

The report is organised into four sections. Section one introduces the report and establishes the context. Section two deals with the methodology for the study. It includes a critical

evaluation of the value of this type of methodology for research in vocational education. Section three reports the views of the teachers on the issues around competency-based training and the Training Reform Agenda. Section four concludes the report by drawing out some of the implications of the study and pointing to future directions for staff development.

2. METHODOLOGY

2.1 Qualitative methodology

The research project was designed as a small scale study of teacher attitudes and experiences in relation to competency-based training in particular, and more generally to the Training Reform Agenda.

As the study was concerned with how teachers were making sense of changes in vocational education policy, a qualitative methodology was judged to be appropriate. The principal method adopted was semi-structured interviews with teachers. This was followed by classroom observation. In addition the researcher sighted, where possible, documentation of assessment tasks, curriculum documents and record-keeping processes.

This took into account the four characteristics of qualitative research defined by Burgess(1985) in *Strategies of educational research: Qualitative methods*. These are:

- *The researcher works in a natural setting*
  The study was located at the teacher's work place. Interviews were conducted in classrooms or staffrooms.

- *The study is designed flexibly*
  Semi-structured interviews were used as the core of the study. This ensured that the researcher covered key questions, however it provided participants with the opportunity to raise any other concerns they might have. These could then be followed up by the interviewer.

- *The research is concerned with social processes and meaning*
  The focus of the study is on how teachers are making sense of the changes that are taking place around them. They are being required to translate policy changes into educational practice on a daily basis. To do this they must make sense of their role as teachers and of what these new policies mean for themselves and their students.

- *Data collection and data analysis occur simultaneously*
  Data were not collected to support or refute a hypothesis. Instead concepts were developed and issues defined as the data were collected.

2.2 Location of the study

The study was located at the Canberra Institute of Technology (CIT). The institute is a multi-disciplinary Institute of Technical and Further Education. Because of the nature of government in the ACT, the institute provides both central office functions and educational delivery functions. The education delivery is undertaken through eight teaching schools . The institute has three major campuses and a number of smaller special purpose facilities. It has an enrolment of approximately 18,000 students plus an additional 5,000 to 6,000 students undertaking fee-for-service programs.

The decision to locate the study within a single institution was made for practical reasons of cost and access. In addition it was recognised that a cross-institutional study would present considerably more complexity in data analysis because of differing policies, practices and time frame in the implementation of competency-based training.

CIT is like most TAFE institutes in Australia in that competency-based training is being gradually phased in. Some areas of the institute are using national curriculum modules while other areas are working with existing curriculum documents which are outcomes based but not written in competency-based training format.

Similarly the extent to which staff have had access to staff development programs varies across the institute. Some schools have run extensive in-house programs for staff in addition to the institute-wide programs offered through the Staff Development Department.

2.3 The teachers

Eight teachers were interviewed for the study. The group was made up as follows:

Office Traineeships	two female teachers
Commercial Cookery	one male teacher one female teacher
Electrical Studies	two male teachers
Fashion	two female teachers

The teaching areas were chosen to provide a spread of disciplines and to include areas teaching trade programs and traineeships as well as certificate and associate diploma programs. Consideration was also given to balancing areas of high female and high male enrolment.

The selection of teachers for the study was not a random process. The researcher approached the head of school and/or the head of department who suggested suitable teachers. The researcher then invited them to participate. Senior officers were concerned to ensure that teachers who participated reflected well on their school and department. All the teachers chosen were experienced and had professional teaching qualifications. They were considered by their supervisors to be competent and conscientious.

2.4 The interviews

An extended interview was held with each participant. The length of the interview was approximately an hour. A tape recording was made of each interview and the tapes were transcribed. In a number of cases participants chose to make additional comments once the tape recorder was turned off. These usually centred around the way that the introduction of competency-based training had been affected by personalities and departmental politics. In these cases the researcher took field notes reflecting the nature of the concerns raised.

A set of focus questions was used to provide a loose structure to the interviews. These were :

- *What is your background with competency-based training?*
  How long have you worked with it, when was it introduced to your department, what has the general response been?

- *How did you learn about it?*
  Did you attend any staff development program, who ran it, have you done any reading yourself, has it been discussed at staff meetings?

- *How do you think it affects the role of a teacher?*
  Do you design your own assessments, do you work with self-paced learning materials, has it changed the way you present material in the classroom?

- *Do you think it has positive benefits for your students?*
  Does it suit some students more than others, for example fast learners, slow learners, non-English speaking background (NESB) students, does it promote or discourage competition, do you think this is a good thing, are students able to move on once they have achieved competency?

- *Are there problems or benefits for your industry on moving towards competency-based training?*

- *Are there recognition of prior learning (RPL) and articulation arrangements for your students?*
  Do you know of cases where this is actually happening, can you give examples, do you think this is a good idea?

- *Why do you think competency-based training is being implemented?*

- Participants were free to raise other issues not mentioned by the researcher. In addition the questions were sufficiently broad to give participants scope to raise any issues of concern to them.

2.5 Classroom observations and collection of materials

It did not prove possible to undertake observations of each individual teacher in the study, however five of the eight were observed. These observations served two functions. First they provided a means of checking actual classroom practice against the expressed views of the teachers. The question of the extent to which teachers modify their practice in the presence of an observer must of course be considered, however these were all experienced and confident teachers and no special preparation appeared evident.

The second outcome of the classroom observations was that the researcher was able to talk to students. As most classes observed were practical, it was possible to have some brief discussion with groups of students about their responses to changes in teaching and assessment practices.

Where possible material was collected from teachers. This consisted of assessment items and class handouts. In addition the researcher was able in some cases to look at methods and examples of record keeping.

2.6 Evaluation of the methodology

The use of qualitative studies of this kind is well established in other educational sectors, however there has been relatively little work of this kind done in the vocational education area. In view of the extent of changes which the sector is undergoing it is important to extend the research base through the use of qualitative methodologies so that the impact of change can be better understood and policies can respond to the practical concerns of teachers.

The study demonstrates the rich resource of material which can be obtained through this kind of approach. It is impossible, using a quantitative methodology, to obtain information about how teachers make sense of what they are doing and yet this is vital information for policy makers. The rich texture of a study of this kind reveals details which are lost in macro-interpretive work.

A common concern about this type of work is the small sample number used, in this case eight teachers in a single institution. It is important to remember that this type of research is not intended to produce results which can be generalised. The goal of the study is rather to allow the reader to access the world of individual teachers and the way in which they make sense of change. By its very nature this type of information is highly personal and contextual.

It is at this level of individual classrooms and individual teachers, of course, that the experiences of education are created for students. It is also the level at which policy is put into practice and where it is contested or accommodated.

This type of study is important then, not because we can assume from the results that this will be how all teachers are operating, but because it gives us a glimpse into classrooms and staffrooms where some of the possible ways of working out educational issues are taking place. It provides a basis on which to think about and compare how these issues are being dealt with in other places. Further it can be used to challenge the thinking of policy makers and professional development staff in considering how they can assist teaching staff to respond positively to change.

The major problem of the methodology from a practical point of view was the volume of data gathered from a relatively small study. Certainly if a larger scale study was considered using analysis of transcripts of interviews as the primary source material, it would be necessary to use a package such as Nudist or Ethnographer to facilitate the management of data.

3. THE TEACHERS' VIEWS

3.1 Knowledge and competency

3.1.1 Fragmenting knowledge

Teachers were not specifically asked to comment on issues of definition of competency or on the relationship between competency and knowledge. For five of the teachers, however, this was an area of considerable concern. These concerns can be grouped into two areas. First they were concerned that competency-based training can be unduly focused on the mastery of individual task skills rather than on the integration and application of those skills. This is despite a shift at the policy level within the institute to a more holistic definition of competency.

Their concern about excessive atomisation of learning is hardly surprising considering the extent of the debate in the literature on exactly this topic. [2] Interestingly however the teachers approached this issue not from their reading on the topic, but very much from a commonsense point of view. Their concerns were framed within the context of their teaching discipline. The way in which they had sought to overcome what they perceived as a problem varied with their subject area. A number of examples are given below :

Commercial Cooking

A subject taught by one of the commercial cooking teachers is a practical subject in which food is prepared for serving in the TAFE restaurant. The curriculum document, which is based on a national module, lists a range of techniques and dishes which the student should be able to demonstrate as a result of the subject. The practical problems of balancing a commercial restaurant situation with the demands of assessment will be taken up at a later point in the report; however, the teacher was concerned in this instance that the focus of the training program as reflected in

[2] See for example Kinsman (1993), Neumann(1979), Giroux (1984)

the curriculum was on tasks rather than task management skills. It would be almost impossible in a practical sense to ensure that each of the students was competent at each of the exhaustively listed skills. In the teacher's view the essential skills to be learned in this situation are integrating and applying the knowledge and skills learned in other basic building block subjects. Students work in a brigade system and are required to manage at least one of the stations during their training program.

The practical solution adopted by this teacher was to make an inferential assessment of the component skills and to focus teaching on the higher level skills of solving problems, managing time, planning and analysing and working effectively in teams.

Fashion

Both fashion teachers commented on this issue. A good deal of curriculum revision has been undertaken recently in this area and this has provided the impetus for discussion on competency-based training in general and this issue in particular. Both teachers reported on the way in which a solution to this issue had evolved through trial in the learning environment and debate in the staffroom. One of the examples given was an assessment item requiring a student to identify a piece of fabric and match it to an appropriate design.

'that's got a lot of small skills there but what is important is that we just don't see the need to break it down. Our thinking is that unless they know their fabric, their fibres, unless they understand design and how that's structured, then they really can't meet the criteria'

3.1.2 Inferring knowledge from performance

A second issue of concern to some teachers was whether it is possible to infer knowledge from performance. A practical example of the dilemma is drawn from a computing subject in the Office Skills Traineeship.

The teacher explained that one of the tests they give is to put a formula into a spread sheet. One of the students used both a function and the addition sign. They should have used either one or the other because they both do the same thing. The teacher wanted to mark the student wrong because

'by writing that function and using those addition signs you demonstrated to me in fact that you don't understand what that function does'

The teacher reported that the student insisted they should be marked right, saying' it's all right because it works'. In the teacher's view:

'sure the result would be all right but they haven't got the foggiest view what that function does'

The same teacher continued on to give other examples regarding underpinning knowledge and how without it students could not transfer between systems and packages. She concluded:

'I certainly don't agree with people who say that if you test something in a practical way that knowledge can be inferred . . . I mean someone can learn to do something mechanically and not have the foggiest clue why they are doing it'.

3.2 Teachers' work patterns

3.2.1 Overview of changes

It is clear from the data collected that the teachers perceived some change in their pattern of work since the introduction of competency-based training. The particular areas commented on in the interviews were the increased workload due to additional assessment and record keeping; and whether or not teachers had changed their personal style of educational delivery.

3.2.2 Assessment and record-keeping workload

Teachers commented on the extent to which their workload had increased under competency-based training. Two teachers did not comment on the issue of workload but all the others felt that there had been a significant increase in workload in their non-teaching time. To some extent this appeared to depend on the assessment, marking and record-keeping procedures that had been set up in different departments.

Some fairly typical responses from the teachers were:

'all my home time during the week is spent on marking and preparation which is a great deal more than what I had before and I guess in percentage terms it could be a 50% increase (on incidental time)'

'there's more assessment, more information being fed through to us and far more paper work'

'I think the assessment side of it has doubled'

'You spend a huge amount of time assessing rather than actually instructing and teaching'

'You wonder whether you are a marker or a teacher'

'The thing that I'm distressed about is the fact that not only am I being, you know, required to go down to looking at things in a more specific sort of way, but it's taking me longer to do it. I'm spending a lot more time . . . because of the changes.'

3.2.3 Changes to educational delivery

In general teachers did not think that competency-based training had significantly changed their teaching style, however it did seem from their comments that they felt they had less autonomy in their classrooms. These two views may seem to be

contradictory, however they were often expressed by the same teacher. To take an example one teacher says of the way of teaching:

' the teaching style is still the same, I spend about half of the lessons giving them the basis of the theory and then I spend the other half giving them the practice which demonstrates the theory'

This same teacher also comments:

'(TAFE teachers) are losing their autonomy in the classroom. It's being dictated by an outside body as to what they do, and how they are going to do it and when they are going to do it'

This apparent contradiction, which shows up in a number of the interviews, may reflect a view that the areas within teachers' control, such as the organisation of class time, are less significant than the control of content and assessment.

The one area where teachers noted a significant shift in teaching style was in Fashion. Here it appeared that they had moved more to 'tutor or learning facilitator' model which Stanton(1989) suggests is happening in further education colleges in Britain. One of the fashion teachers described this change:

'well that was the really exciting bit, I adopted teaching strategies like "modelling" where I would take on the preparation of the project myself. There was quite a different classroom environment, that sharing, and the fact that I was leaving myself wide open, like if things didn't go right I needed to know how to handle that. It worked extremely well, it threw out the door the whole concept of the teacher in front of the class'

The questions of why this one department may be responding differently will be further explored in the conclusion to this paper.

3.3 Assessment

3.3.1 Overview

Given the central position of assessment in the competency-based training framework, it is not surprising that a large part of teachers' concerns and views centred on assessment. Broadly their comments fell into two areas — the practical issues in implementing competency based assessment, and the more theoretical concerns such as appropriate standards for testing, the issues around graded and ungraded assessment and how to ensure that higher order cognitive skills are tested.

3.3.2 The practical issues

Teachers were virtually unanimous in their view that the ideal of competency-based training is a mastery learning system in which students can work at their own pace and be tested when they are ready. If competent they should be able to move on to the next module. If the student is not judged competent they should receive extra tuition and then be able to re-test. The teachers were able to provide a wealth of experience and knowledge of the practical problems involved in translating this ideal into practice.

Re-testing was an area where a range of practical issues were raised. Concerns were:

- how many times a student should be allowed to re-test;
- whether the classroom teacher should do the re-testing, and in practice how is this to be scheduled into their workload;
- whether additional tutorial assistance will be provided to students who do not achieve competency on a first or second test, if so by whom and when;
- should different test items be used each time a student is re-tested and is the design of these additional test items a further task for the classroom teacher.

In practice these problems have been solved differently in different departments. Office Traineeships allow up to four re-tests. This is in excess of the current institute guideline on re-sitting tests, which allows one re-sit. It reflects the real concern of this department to maximise the chances of all their students to achieve competency. The classroom teacher designs four versions of tests. One re-test is given if a student fails to achieve competency. If the student does not pass this test they will be given tutorial assistance before further re-testing. The student can attempt the test once more if they again fail. There is no special time allocation for teachers to cover the tutorial assistance and additional marking involved in this system.

Electrical Studies allow students to re-test once. One teacher has a designated teaching load for re-testing. Ideally a different assessment task is used however on occasions this is not possible because of workloads. Some re-testing is done by classroom teachers, particularly in theory testing. Students are only required to resit those sections of a test that they did not pass. One teacher describes how this works :

' it's almost an impossibility trying to keep track of test results . . . if the test has got four sections, you might have a class of twelve or thirteen students, eight might pass everything and the other five will pass part, but not all. So you've got to keep track of who has passed which bits because they are the bits they have to resit . . . it's a nightmare.'

Both Fashion and Commercial Cookery allow students to re-submit or re-try practical work at least once. In the view of the teachers, theory subjects are amenable to a formalised retesting process however there are real problems in retesting in some practical subjects.

Teachers acknowledged that despite the existence of assessment standards, they would sometimes pass a borderline student simply to avoid the complications of retesting. Clearly if a student is well below the standard they would not do this, however several teachers admitted that knowing the problems

involved in retesting might influence them to judge a student more leniently. In addition three of the teachers said that they coached the students to try to ensure that they passed tests.

Many of the practical problems raised in the interviews were specific to a teaching area. For example in Commercial Cookery ingredients are ordered two weeks in advance for practical classes. Additional ingredients would be needed to allow students to re-prepare a dish. Advance notice of two weeks would then be needed to arrange practical re-tests. This has complications for teachers' schedules as they may have completed the module by then and time is not scheduled in their load for re-testing. It is further complicated where the students in question are apprentices on block exemption, who may be back in the workplace in two weeks time.

A further problem arises for Commercial Cookery in classes where students are preparing food for the TAFE restaurant. If students were given the option of challenge testing at any point during the module, and they were judged competent, ideally they could leave the class and move on to further learning. In practice a full brigade is needed to run a commercial TAFE restaurant kitchen. It would not be practical to run such a class if students were able to take up the flexible entry and exit options.

Flexible entry and exit also poses problems for traineeships and apprenticeship programs. Students are required to attend classes as part of their contract with their employer. In practice, teachers try to cater for students who progress rapidly by providing additional and more challenging learning options. As they point out however the option of accelerating through their learning is not genuinely available to these students at present.

None of the teachers interviewed were operating in a completely self-paced learning environment. Their view appeared to be that many of the practical problems would be solved if self-paced learning was available, however they pointed out that cost and management implications may mean that it will be a considerable time before this is implemented.

3.3.3 Theoretical concerns

Graded assessment was an issue raised by all the teachers. Their lengthy and thoughtful comments reflect their deep concern about this issue. The most frequently mentioned reservation about ungraded assessment related to student motivation. Most teachers felt that good students were less motivated because they did not get the recognition of a distinction grading. Typical comments were:

'we've had a drop in standards'

'the uniform standards dropped dramatically'

'that's the problem, it's a great leveller'

'it does stifle incentive'

' it's a pity for them not to get a distinction, it gives them that extra thing to strive for'.

Teachers also pointed out that many areas of CIT are still using graded assessment and have not changed over to competency-based training as yet. In fact their general view was that nowhere in CIT was competency-based training fully implemented as yet. This problem of working within two systems was felt to complicate the issue and to make it more difficult to explain the changes to students.

Another concern raised by the teachers related to the assessment of higher order skill. Two particular areas were mentioned. The first was creativity. This was raised by Fashion and Commercial Cookery teachers. In both these areas creativity is highly prized, and teachers felt that students who showed some 'flair' or excellence in this area should be recognised. They were concerned, however, about the element of subjective judgment in assessing creativity. They regarded it as an area where it was difficult to establish standards and they said it was therefore overlooked in assessment. They felt it had been put into the 'too

hard' basket. In fact these teachers were confident of their own judgments about creativity however they were concerned that it would be difficult to justify decisions they might make within the 'objective' competency-based training framework. One of the teachers made an interesting distinction between design and creativity. She felt it was relatively straightforward to establish standards for design but more complex for creativity.

The second higher order skill that was frequently mentioned was problem solving. Teachers were concerned that in all four areas of teaching, this was an essential skill for students to acquire. They commented however that in many subjects the emphasis on testing component skills could mean that the important skills of integration and application were overlooked. The exceptions were the project-based subjects which they said provided for problem solving, and the subjects focused on trouble shooting for example in electronics.

The final problem which teachers raised was the establishment of assessment standards. They were concerned about the basis on which cut off points were set. Some typical examples of this dilemma were :

- How to decide where the pass/fail mark should be set in a theory test. In practice they were confident that they could make the judgment about the point which demonstrated competence however they were concerned about how this could be justified.

- What coverage of a topic is required to demonstrate mastery. One example given related to computer terminology. Students were required to demonstrate ' a knowledge of computer terminology'. The teacher speculated about how many terms this would mean, how many should be tested, and the point at which an inferential judgment could be justified. Again the teacher had a tacit judgment about this but was concerned about justification under this different system.

3.4 Views about students

Teachers were asked their views about how students responded to competency-based training. Their comments fall into two areas. First is the view discussed above that student motivation in general has not been aided by the competent/not yet competent marking system.

The second area of comment related to whether the new system suited some students better than others. The unanimous view was that as the system moved towards self-pacing, the more mature and motivated students were advantaged. There was a general concern that as teachers' workloads increased because of additional assessment and record-keeping tasks, less time was available to help struggling students. Several teachers suggested that they should have a specific time allocation in their teaching load for tutorial work with students needing additional assistance.

On the other hand a number of the teachers expressed the view that the clear expression of standards had assisted in student selection. This meant that in general students were coming in with the pre-requisite skills and knowledge and the teacher should not have to spend so much time assisting students whose main problem was inadequate entry level skills.

3.5 Staff development

All the teachers had attended a staff development workshop, although in some cases this was a few years ago. These workshops were run by the Staff Development Department and gave participants an overview of competency-based training and the Training Reform Agenda. Teachers with one exception had found them helpful although not sufficiently practical.

The main source of information among the teachers interviewed appeared to be discussions with colleagues. The researcher asked if the teachers had read anything on this topic. The usual response was that they had done a bit of reading however no teachers volunteered concrete evidence of this. All teachers mentioned staff room discussions or discussions with colleagues as a way of working through the practical issues in their teaching area.

CIT is currently offering customised staff development workshops for teaching schools or teaching departments. None of the teachers interviewed had attended workshops of this kind but several expressed a preference for this more contextualised and practical approach to staff development.

Teachers were asked to speculate on why competency-based training was being introduced in TAFE. All teachers were able to comment on the broader political agenda although some had more developed views than others. Their responses were framed in terms of economic productivity, a competent workforce, a clever country, a skilled workforce and economic efficiency. There was some scepticism expressed about the extent to which education on its own could bring about these changes, for example :

'I think education is one of the ways of getting a clever country but I think it's a lot more than that. People have to be encouraged to invest their time and their money . . . in research and development.'

'There's a bit of responsibility lacking on the part of the employer. They are casting their training responsibilities back onto the educational sector . . . there are lots of attitudinal factors that students come in with and, you know, you can't really motivate a student . . . you can try but it's up to them . . .'

4. CONCLUSION

4.1 Overview

The teachers expressed support for many of the goals of competency-based training, particularly for recognition of prior learning, articulation and portability of qualifications. They believed that TAFE should have a strong industry base and should produce students with employment related competencies. Their concerns were largely focused around the particular application of competency-based training and the complications of translating the goals into practice.

There is no doubt that the teachers in the study were experiencing considerable pressure as a result of the changes taking place in TAFE. This appeared to derive from four main areas :

The extent to which teachers felt their tacit judgment was challenged by competency-based training

All the teachers in the study were experienced, and were considered by their supervisors to be capable and professional. It would be expected that they would have highly developed tacit judgment about the competence of students and that they would feel comfortable in the exercise of that judgment. The observation of the researcher however was that the introduction of competency-based training has resulted in considerable anxiety on the part of the teachers regarding the exercise of tacit judgment.

It appeared that the difference in the nature of justification and recording of decisions particularly in relation to assessment has created in teachers an anxiety about when, or even whether, it is justifiable to use their professional judgment as the basis for student feedback. This was particularly marked where an atomistic type of check listing was used. A striking example of this type of problem was given by a commercial cooking teacher who now feels that he should check the competence of students

at each individual step in the production of a cauliflower mornay. Broken down to its smallest parts, this is a task requiring a considerable number of steps. To take the bechamel sauce alone, the steps involved include putting the cloves in the onion, infusing the flavours in the milk, making the roux, incorporating the milk into the roux, adding other flavourings and ingredients, correctly napping the sauce, and at the final stage glazing it. Clearly this teacher, who has qualifications in both education and commercial cooking, can quickly diagnose the problem if a student does not competently produce this dish. Checking each individual stage with each student would appear to be unnecessary however the check list suggests to him that simply making a judgment at this final stage is not adequate. He must be able to justify the judgment through an elaborate process of checking.

Where check lists such as this are used, it appears to suggest to teachers that their professional judgment does not provide an adequate guide and that they should rely instead on a formularised approach, based on routine checking. There is a sense in which these teachers seemed to feel that this type of checking was not only checking of students but was also a way of checking on teachers.

The extent to which assessment shapes the teaching and learning process under a competency-based training system

This is hardly surprising given the assessment focus of this system. Teachers were concerned that the focus of their work had shifted from teaching to assessing. They were all worried about time pressures and the need to cover material within a certain time so that assessment tasks could be done, recorded and if necessary re-done. As learning is broken down into modules, each with an assessment, the volume of assessment is often considerably increased. The significant additional workload that has resulted from assessment and recording procedures is causing considerable pressure on teachers.

In addition they were anxious that they were not providing optimal learning conditions for all their students. All the teachers in the study were highly motivated and student oriented. Most were experiencing difficulties with a system which focused on outcomes rather than the process of student learning. Several expressed the view that there should be more tutorial time available to assist individual students who experience difficulties.

The difficulties of working in a transition process

No teachers felt that competency-based training was in its final state in their area. All of them were concerned that what they were doing might not be exactly correct, or might not be in line with what was required nationally. It was interesting that where teachers had been actively involved in the process of curriculum redesign, as in Fashion, teachers appeared more confident that they were on the right track. Where national modules were used and teachers had little say in how they were adapted locally, they expressed a sense of disempowerment. Apple (1982) throws an interesting light on this curriculum issue.

It was interesting to note also the extent to which departments had evolved their own responses to practical problems such as re-testing. This is perhaps predictable during a period of transition as it is difficult to work out, at a system level, all the problems which will arise. The result of these differing arrangements however can be considerable differences in the working conditions of teaching staff. This is a source of discontent and friction among staff. While this issue is now being addressed at a policy level, the delay in addressing the concern has caused problems.

The relatively superficial level of information and understanding of competency-based training and the Training Reform Agenda

All the teachers interviewed had an understanding of the broad goals of competency-based training and of the practical problems of implementation. None of them however appeared to have had the opportunity to read widely on the topic, for example they did

not mention international models or experiences. Most did not appear to be aware of the different views expressed in the literature on the nature of competency or even that this might be an area of controversy or debate. Their comments on the Training Reform Agenda were very much what might be expected of an informed member of the public. Considering the scale of change implied in shifting to competency-based training, it might be expected that TAFE teachers would be aware of, and be involved in, debating the issues, in much the same way as have members of the higher education community.

4.2 Future directions

In considering how the teachers in this study, and possibly other TAFE teachers, could be assisted in dealing with the impact of change resulting from the introduction of competency-based training, it is important to consider two responses to change-related stress. The first is to focus on assisting individual teachers to cope with change. The second response is to minimise what Webb and Ashton (1977) refer to as 'ecological threats to teacher efficacy'. These are the problems which arise not from the inability of the teacher to cope with change, but from the environment in which the teacher is seeking to perform competently.

Staff development is frequently suggested as the method by which individual teachers can be assisted to cope with change. At present this has been largely focused on bridging what is perceived by most policy makers as a knowledge gap regarding the Training Reform Agenda.

It is suggested that the focus of staff development needs to be expanded. Firstly a shift needs to be made from the knowledge dissemination model of staff development which has driven many existing programs, to an interactive model in which teachers are encouraged to participate in, and help to shape, this major professional debate regarding vocational education. In order to do this, teachers will need to see competency-based training in its historical context. They will need to be aware of the current debate over issues such as the definition of

competency. It will be helpful also for them to be more aware of the way in which other countries are grappling with similar problems and of their variety of solutions.

Secondly staff development needs to focus, not on an ideal future when all problems of implementing competency-based training are resolved, but on the current reality of teacher practice. Teachers would be greatly assisted by examples of how colleagues have resolved real problems in the learning environment and by opportunities to debate and discuss possible solutions to their current problems. For teachers to derive their own models of good practice, greater emphasis in staff development needs to be placed on the interface between teachers and students instead of simply focusing on the macro level of national structures and implementation.

The reality for teachers in this study is that they cannot defer solving the problems of the implementation of competency-based training. They must deal daily with these issues and come up with practical solutions. If they are to do this professionally and competently, they need to feel that they have a solid underpinning of knowledge of the issues and the range of possible solutions to the practical problems.

The second way in which teachers could be assisted is through changes in their work environment, in particular through a more rapid policy response at an institutional level to the concerns of teachers. This requires that consultative mechanisms exist so that policy makers can be made aware of emerging problems, and that there is a commitment to providing guidance and clear policy direction to assist teachers in their work. Assessment policy and the resulting issues relating to teacher workloads are examples of areas in which a faster policy response would greatly assist in reducing teacher stress.

Both staff development and policy development would benefit from the funding of considerably more research of a micro-interpretive nature. Studies, such as this one, have a number of benefits. They provide information for teachers about some of

the ways in which their peers are coming to grips with competency-based training. They assist policy makers by enabling them to see the issues from the perspective of teachers and they highlight areas in which there is a need for both staff development and policy responses.

REFERENCES

Apple, Michael, 1982, 'Curriculum form and the logic of technical control' in *Cultural and economic reproduction in education,* ed Apple, Michael, Routledge and Kegan Paul, London.

Burgess, J ed 1985, *Strategies of educational research: Qualitative methods,* Falmer Press, London.

Giroux, Henry, 1984, 'Public philosophy and the crisis in education', *Harvard Education Review,* 54(2)

Gonczi, Andrew, 1993, 'Integrated approaches to competency based assessment', paper presented at VEETAC CBT Working Party National Assessment Research Forum 1&2 April, 1993.

Haffenen, Ian and Brown, Alan, 1989, 'Towards the implementation of competency based curriculum in colleges of FE' in *Competency based education and training,* ed Burke, John Falmer Press, London.

Kinsman, Martha, 1992, Competency Based Education in TAFE' *Australian TAFE Teacher,* Fourth Quarter.

Neumann, William, 1979 ' Educational responses to the concern for proficiency' in *On competence: A critical analysis of competence based reforms in higher education,* ed Grant, John, Josey Bas, San Francisco.

Stanton, Geoff, 1989, 'Curriculum Implications' in *Competency based education and training,* ed Burke, John, Falmer Press, London.

Webb, Rodman B and Ashton, Patricia 1977 'Teacher motivation and the conditions of teaching' in *Changing policies, changing*

teachers: New directions for schooling eds Walker, Stephen & Barton, Len, Open University Press, Milton Keynes.